SYNDROMIC CASE MANAGEMENT OF RTIs
Advantages, Limitations, Optimization

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CLASSIFICATION OF RTIs

- STDs

- Non-STDs - infections which result from an over growth of normal vaginal flora e.g. bacterial vaginosis & yeast infections

- Iatrogenic
## Estimates of New Cases of STDs Per Year (1995)

<table>
<thead>
<tr>
<th>Disease</th>
<th>New Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gonorrhoea</td>
<td>62 million</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>89 million</td>
</tr>
<tr>
<td>Syphilis</td>
<td>12 million</td>
</tr>
<tr>
<td>Chancroid</td>
<td>7 million</td>
</tr>
<tr>
<td>Trichomoniasis</td>
<td>170 million</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>340 million</strong></td>
</tr>
</tbody>
</table>

*source: UNAIDS; 1997*
## ESTIMATES OF NEW CASES OF STDs PER YEAR (1995) IN MILLIONS

<table>
<thead>
<tr>
<th>REGION</th>
<th>NEW CASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTH AMERICA</td>
<td>14</td>
</tr>
<tr>
<td>LATIN AMERICA &amp; CARIBBEAN</td>
<td>36</td>
</tr>
<tr>
<td>WESTERN EUROPE</td>
<td>16</td>
</tr>
<tr>
<td>E. EUROPE &amp; C. ASIA</td>
<td>18</td>
</tr>
<tr>
<td>EAST ASIA &amp; PACIFIC</td>
<td>23</td>
</tr>
<tr>
<td>SOUTH &amp; S.E. ASIA</td>
<td>150</td>
</tr>
<tr>
<td>AUSTRALASIA</td>
<td>1</td>
</tr>
<tr>
<td>N.AFRICA &amp; MIDDLE EAST</td>
<td>10</td>
</tr>
<tr>
<td>SUBSAHARAN AFRICA</td>
<td>65</td>
</tr>
</tbody>
</table>

*(source: UNAIDS; 1997)*
FAILURE TO CONTROL STDs: PROGRAMME LEVEL

- Low priority by policy makers & planners
  - perceived discreditable behaviour
  - failure to associate with complications
  - failure to recognize size of problem
- Service delivery thru specialized STD clinics
- Treatment strategy focus on (unrealistic) definitive Dx vs (practical) decision-making
- Ineffective low-cost antibiotics - antimicrobial resistance
- Little emphasis on prevention/education
FAILURE TO CONTROL STDs: INDIVIDUAL LEVEL

• Asymptomatic infections
  Men 30%  Women 70%

• Unawareness e.g vaginal discharge

• Willingness to seek care
  fail to recognise seriousness
  embarrassment/stigma
  access to treatment
  cost of treatment
• Syndromic management
• Syndromic plus clinical management
• Syndromic plus clinical management & limited laboratory tests
• Clinical plus laboratory tests (etiological diagnosis)
SYNDROMIC CASE MANAGEMENT

• Is based on identifying consistent groups of symptoms and signs which constitute a definite ‘syndrome’.

• Syndromic case management algorithms/flowcharts are then used to guide the treatment.
IMPORTANT REQUIREMENTS

• Knowledge of most common causative organisms for each syndrome

• choice of anti-microbial treatment:
  - Broad spectrum
  - high efficacy (95%)
  - single dose (preferably)
  - low cost
  - long shelf life

• Anti-microbial resistance pattern

• Partner notification & counselling

• Referral for complicated cases
• “A set of carefully designed questions to elicit salient features about the individual’s sexual life that would indicate the probability of that individual having STD”
RTI/STD SYNDROMES

- Urethral discharge
- Genital ulcer
- Vaginal discharge
- Lower abdominal pain
- Scrotal swelling
- Eye infection in the New born
Recommended Treatment Regimens

• **Neisseria Gonorrhoeae:**

  *Single dose:* cefixime- 400 mg p.o.
  ciprofloxacin- 500 mg p.o.
  ceftriaxone- 250 mg i.m.
  spectinomycin-2 g i.m
  kanamycin- 2g i.m.

  *Multiple dose:* co-trimoxazole 10 tabs/d/3days
  (trimethoprim 80mg/sulfamethoxazole 400mg)
Treatment Regimens

• **Chlamydia Trachomatis:**
  
  *Single dose:* - azithromycin-1g. P.o.
  
  *Multiple dose:*
  - doxycycline-100mg. P.o., 2x/d x7 days
  - tetracycline- 500mg. P.o., 4x/d x7 days
  - erythromycin-500mg. P.o., 4x/d x7 days
  - sulfafurazole-500mg. P.o., 4x/d x10 days
Treatment Regimens

- **Syphilis - Treponema Pallidum:**
  
  **Single dose:**
  - benzathine penicillin G-2.4mU i.m.; in 2 injcs. same day
  
  **Multiple dose:**
  - aq. Benz. penicillin 1.2 mU i.m/d x 10 days
  - doxycyclin 100mg p.o., 2x/d x 15 days
  - tetracyclin 500mg p.o., 4x/d x 15 days
  - erythromycin 500mg p.o. 4x/d x 15 days
Treatment Regimens

• Chancroid - Haemophilus ducreyi:

  *Single dose*: ciprofloxacin- 500 mg p.o.
               ceftriaxone- 250 mg i.m.

  *Multiple dose*:
  erythromycin- 500mg p.o., 4x/d x 7 days
  co-tromoxazole, 2 tabs. 2x/d x 7 days
Treatment Regimens

• **Bacterial Vaginosis / Trichomoniasis:**

  **Metronidazole**

  *Single dose:* 2 g p.o.

  *Multiple dose:* 400-500 mg p.o., 2x/d x 7 days
Treatment Regimens

• Candida Albicans:

*Single dose:*
- clotrimazole - 500mg inserted in vagina

*Multiple dose:*
- clotrimazole or miconazole - 200mg vaginal pessary, 1/d x 3 days
- nystatin - 100 000U vaginal pessary, 1/d x 14ds

*Topical antifungal cream*
STD Diagnosis

The future:

• Liquid based cytology

• Dipsticks-chromatography
INTERRELATIONSHIP OF STD / HIV/AIDS / Cx Ca

- Common risk factors - Prevention
- Common target audience
- Health services
- STDs facilitate HIV transmission
- STDs(HPV) - major cause of CxCa
- STD/HIV facilitate malignant transformation in cervical lesions
- HIV/AIDS-Cervical lesions progress faster, resistant to treatment
COMMON RISK FACTORS FOR STD/HIV/CxCa

• Lack of information
• Sexual behaviour
  – Early onset
  – No of partners
• Smoking
• Malnutrition
• Socio-economic factors
• Contraceptive method
STATE OF THE ART-STD

- IEC
- STD surveillance programmes
- Management: Tx, counselling esp. adolescents, contact tracing
- Barrier contraception esp. amongst adolescents
- Syndromic Management
- Anti-microbial surveillance
SYNDROMIC MANAGEMENT - Advantages

• Facilitate detection of STDs in resource constrained areas

• Control common STDs, prevent sequelae (?80%)

  • HOWEVER!
Limitations

• STD prevalence trends (Europe, S.E.A, W.P.)

• the ideal antibiotic / antimicrobial resistance

• professional motivation
Optimization

• True statistics - STD prevalence & surveillance
• Laboratory diagnostic facilities - albeit limited
• Antibiotic susceptibility surveillance
• Integrated programmes